

ABSTRACT

A method of making a semiconductor comprises depositing a group II-group VI compound onto a substrate in the presence of nitrogen using sputtering to produce a nitrogen-doped semiconductor. This method can be used for making a photovoltaic cell using sputtering to apply a back contact layer of group II-group VI compound to a substrate in the presence of nitrogen, the back coating layer being doped with nitrogen. A semiconductor comprising a group II-group VI compound doped with nitrogen, and a photovoltaic cell comprising a substrate on which is deposited a layer of a group II-group VI compound doped with nitrogen, are also included.